CLAIMS

1. A method of producing a low molecular weight organic aglycon compound comprising following steps:

a) fermenting a microorganism cell in a suitable medium where the microorganism is capable of growing, which comprises a gene encoding a product involved in the biosynthesis pathway leading to a low molecular weight organic aglycon compound and a glycosyltransferase gene encoding a glycosyltransferase capable of glycosylating the produced aglycon, under suitable conditions wherein the cell produces the aglycon and the corresponding glycosylated form of the aglycon;

b) deglycosylating the glycosylated form of the aglycon; and

c) recovering the aglycon compound;

(i) wherein the low molecular weight organic aglycon compound has a molecular weight from 50 to 3000, and

(ii) wherein the glycosyltransferase is a glycosyltransferase capable of conjugating a sugar to the aglycon compound.

2. The method of claim 1, wherein the microorganism cell with the glycosyltransferase during culture fermentation is capable of producing higher amounts of the glycosylated form of the aglycon as compared to the amounts of the corresponding aglycon produced by the same microorganism cell without the glycosyltransferase.

3. The method of claim 2, wherein the microorganism cell is a yeast cell.

4. The method of claim 3, wherein the yeast cell is a yeast cell selected from the group consisting of *Saccharomyces spp* e.g. *Saccharomyces cerevisiae*, and *Pichia spp*.

5. The method of claim 2, wherein the microorganism cell is a prokaryotic cell.

6. The method of claim 5, wherein the prokaryotic cell is an E. coli cell.

7. The method of any of the preceding claims, wherein the glycosyltransferase gene is a heterologous glycosyltransferase gene.

8. The method of any of the preceding claims, wherein the glycosyltransferase is an UDPG-glycosyltransferase, preferably an UDPG-glucosyltransferase.

9. The method of any of the preceding claims, wherein the low molecular weight organic aglycon compound is an organic aglycon compound that comprises a compound that contains Hydroxy-, Amino-, Sulfide-, or Carboxy functional group that can be glycosylated by use of the glycosyltransferase of any of the preceding claims.

10. The method of claim 9, wherein the low molecular weight organic aglycon compound is an organic aglycon compound that comprises a compound that contains Hydroxy- functional group (i.e. an alcohol) that can be glycosylated by use of the glycosyltransferase of any of the preceding claims.

11. The method of claims 9 or 10, wherein the aglycon compound has a molecular weight weight from 50 to 1000.

12. The method of claim 11, wherein the aglycon compound is a secondary metabolite compound.

13. The method of claim 12, wherein secondary metabolite compound is a plant secondary metabolite compound selected from the group consisting of:

- Terpenoids
- Alkaloids
- Phenylpropanoids
- Phenyl derivatives
- Hexanol derivatives
- Flavonoids
- Coumarins, stilbenes
- Cyanohydrins

- and Glucosinolates.

14. The method of claim 13, wherein the plant secondary metabolite organic aglycon compound is vanillin.

15. The method of claim 14, wherein the microorganism cell is a yeast cell.

16. The method of claim 15, wherein the yeast cell is a yeast cell selected from the group consisting of *Saccharomyces spp* e.g. *Saccharomyces cerevisiae*, and *Pichia spp*.

17. The method of claim 14, wherein the microorganism cell is a prokaryotic cell.

18. The method of claim 17, wherein the prokaryotic cell is an E. coli cell.

19. The method of any of the preceding claims, wherein the deglycosylating step b) of claim 1 takes place outside the growing cell following excretion or extraction of the in step a) produced glycosylated form of the aglycon and wherein the deglycosylating is an enzymatic process mediated by a beta-glucosidase.